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(54) SEAL ARRANGEMENT FOR A PISTON ROD (75) Inventor: **Reinhold Ficht**, Kirchseeon (DE) Assignee: **Bertwin R. Geist**, Eurasburg (DE) (*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 398 days. 13/990,875 (21) Appl. No.: Sep. 21, 2011 (22) PCT Filed: (86) PCT No.: PCT/EP2011/066466 § 371 (c)(1), (2), (4) Date: Jul. 24, 2013 (87) PCT Pub. No.: WO2012/072295 PCT Pub. Date: Jun. 7, 2012 (65)**Prior Publication Data** Nov. 7, 2013 US 2013/0291716 A1 (30)Foreign Application Priority Data Dec. 2, 2010 (DE) 10 2010 053 271 (51) **Int. Cl.** F16J 15/18 (2006.01)F16J 1/00 (2006.01)F16J 15/00 (2006.01)F16J 15/28 (2006.01)F16J 15/56 (2006.01)(52) U.S. Cl. CPC *F16J 1/00* (2013.01); *F16J 15/004* (2013.01); F16J 15/28 (2013.01); F16J 15/56 (2013.01) (58) Field of Classification Search CPC F04B 39/041; F16J 15/28; F16J 15/004;

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(57) ABSTRACT

The invention relates to an arrangement for sealing off a piston rod, which moves substantially rectilinearly in a reciprocating manner with respect to a passage opening, of a reciprocating-piston machine, having at least two internally clamping sealing rings, which surround the piston rod and are arranged in the region of the passage opening so as to be substantially fixed with respect to a seal housing, and are mounted in the seal housing so as to be movable in a radial direction, and between at least two seal rings there is arranged a spacer ring which is arranged spaced apart from the piston rod, so as to form, together with the seal rings and the piston rod, an accumulation chamber for medium to be sealed off, for example for oil, and the spacer ring has at least one passage for discharging medium out of the accumulation chamber.

25 Claims, 5 Drawing Sheets

